# Montana Laboratory Sentinel

Updates from the MT Laboratory Services Bureau



http://healthlab.hhs.mt.gov/

3/18/10

## Celebrate!

National Medical Laboratory Professionals Week April 18-24, 2010



## Exploring the Rivers of Change

## ASCLS-MT Spring Meeting Educational Sessions

Missoula April 14-17, 2010

Click here Program Details & Registration

**17** Educational Sessions PACE Continuing Education Credits

An article about the meeting can be read in ASCLS's Montana Laboratory News:

http://ascls-

montana.asclsregionviii.org/MLN%20Spring%202010.pdf

"In Life, you just have to decide if you're a **Tigger** or an **Eeyore.**"

Dr. Randy Pausch



"We cannot change the cards we are dealt, just how we play the hand"

Randy Pausch "The Last Lecture"

## Clarification of Rapid Influenza Testing & PCR

The Communicable Disease Update below contains this new message:

"Interpret positive rapid influenza tests with caution at this time. A positive screening test result is most likely to be truly positive during periods of peak influenza activity in the population tested. A positive screening test result is most likely to be falsely positive during periods of low influenza activity in the population tested, including early and late in the influenza season. A confirmatory test such as PCR or viral culture should be considered (IDSA Guidelines-http://www.journals.uchicago.edu/doi/pdf/10.1086/598513)."

MTPHL has seen quite a few Rapid Test positive, PCR negative specimens which we consider to be false positives and recommend that suspect influenza specimens be sent to the state for confirmation. This should not affect patient treatment. When Influenza is circulating, the Positive Predictive Value of rapid tests increases and confirmatory testing is not necessarily recommended.

The following article appeared in the *Montana Laboratory Sentinel* (9/11/09) which provides additional clarification:

#### CDC Evaluates RIDTs Used in Detection of H1N1

The August 7, 2009 issue of the *Morbidity and Mortality Weekly Report* details analytical studies comparing the performance of three commercially available rapid influenza diagnostic tests (RIDTs) with the rRt-PCR assay developed by CDC & approved as a Section 501(k) device by the FDA. The results showed that, although the RIDT were capable of detecting the novel H1N1 virus from respiratory specimens containing high levels of the virus, the overall sensitivity was 40%-69% among all specimens tested and declined substantially as virus levels decreased. (*APHL e-Update* Aug 13, 2009)

For additional information, contact Debbie Gibson, Laboratory Manager, at <a href="mailto:debgibson@mt.gov">debgibson@mt.gov</a> or 406-444-5970.



www.safetylady.com/

## OSHA is Now on Youtube.com - Respirator Safety

Yes, even the Department of Labor (DOL) is catching up with the times. You can now view all sorts of DOL videos via Youtube.com.

The "Respirator Safety" video shows healthcare workers how to correctly put on and take off respirators, such as N95s. The "Difference between Respirators and Surgical Masks" video explains the particular uses for each one and how they prevent worker exposure to infectious diseases.

http://www.youtube.com/usdepartmentoflabor#p/u/4/Tzpz5fko-fg

### MT Communicable Disease Update as of 03/12/10

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.

Questions regarding its content should be directed to 406.444.0273 (24/7/365).

<a href="http://cdepi.hhs.mt.gov">http://cdepi.hhs.mt.gov</a>

<u>DISEASE INFORMATION</u> <u>Summary – Week 9 – Ending 03/06/10</u> – Disease reports received at DPHHS during the reporting period February 28 - March 6, 2010 included the following:

- Vaccine Preventable Diseases: Varicella (3)
- Enteric Diseases: Campylobacteriosis (1), Cryptosporidiosis (1), non-0157 STEC (1)

### **NEW!** Surveillance Snippets – <u>Serologic Testing for Acute Infection</u>

Some diseases are detected using serologic assays. Many of these diseases like vector-borne diseases, and many vaccine preventable diseases, require TWO blood specimens in order to confirm that the disease in question is recently acquired. IgM and IgG antibodies in the blood are measured to determine whether a person's infection is recently acquired.

In general, a high IgM titer is an indicator of a specific and recent infection.

- However, IgG is also used to confirm a recent infection. A four-fold increase in the IgG titer from the time an
  acute specimen is drawn (within one week of onset of disease) to when a convalescent specimen is drawn (2-4
  weeks after onset of disease), indicates a recent infection.
- When testing for a recent infection, IgM AND IgG testing on paired sera (acute/convalescent) is best.

<b>Disease Status</b>	IgM	Acute IgG	Convalescent IgG
Recent infection	High	Not present or low	Four-fold increase
Past Infection	Low or not detectable	Present	No or slight increase

<sup>\*</sup> General information; disease specific criteria should be used when determining timing for IgM and IgG testing Thanks to Denise Higgins, Montana Public Health Laboratory, for her assistance in writing this "snippet".

**RSV** - Increased levels of RSV activity are being reported nationwide and around the state at this time. Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia in children aged <1 year worldwide, some of which is severe and requires hospitalization. In addition, RSV is also responsible for severe respiratory disease in those >65 years old. In the U.S., RSV season generally begins during the fall and continues through the winter and spring, but the exact timing of RSV circulation varies by location and year. Data from the National Respiratory and Enteric Virus Surveillance System (NREVSS) are used to monitor the occurrence of RSV in the U.S. <a href="http://www.cdc.gov/surveillance/nrevss/rsv/state.html">http://www.cdc.gov/surveillance/nrevss/rsv/state.html</a>. Although individual cases of RSV are not reportable in Montana, outbreaks (>3 cases clustered by time/location) are. More information on RSV: <a href="https://www.cdc.gov/rsv">www.cdc.gov/rsv</a>

#### **Influenza**

**Montana** – Activity level in Montana for week 9 is **NO ACTIVITY.** *Interpret positive rapid influenza tests with caution at this time.* A positive screening test result is most likely to be truly positive during periods of peak influenza activity in the population tested. A positive screening test result is most likely to be falsely positive during periods of low influenza activity in the population tested, including early and late in the influenza season. A confirmatory test such as PCR or viral culture should be considered (IDSA Guidelines-

http://www.journals.uchicago.edu/doi/pdf/10.1086/598513). Current information on influenza testing by the Montana Public Health Laboratory can be found at http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml.

**United States -** During week 9 (03/06/10), influenza activity stayed at the same level as the previous week. (<a href="http://www.cdc.gov/flu/weekly/">http://www.cdc.gov/flu/weekly/</a>)

#### **Hydrolyzed Vegetable Protein Product Recalls**

The U.S. Food and Drug Administration is actively investigating findings of *Salmonella* Tennessee in hydrolyzed vegetable protein (HVP) manufactured by Basic Food Flavors, Inc., in Las Vegas, NV. HVP is a flavor enhancer used in a wide variety of processed food products, such as soups, sauces, chilis, stews, hot dogs, gravies, seasoned snack foods, dips, and dressings. At this time, no illnesses associated with this contamination have been reported to the FDA.

Updates: http://www.fda.gov/Safety/Recalls/MajorProductRecalls/HVP/default.htm

**Norovirus** – Montana continues to experience increased levels of norovirus activity. Guidance documents can be found at: <a href="http://www.dphhs.mt.gov/PHSD/epidemiology/cdepi-norovirus.shtml">http://www.dphhs.mt.gov/PHSD/epidemiology/cdepi-norovirus.shtml</a>.

**2008 Antibiogram** – The 2008 cumulative state antibiogram, results from a survey of 34 laboratories from across Montana, is now available at <a href="http://mara.mt.gov/documents/2008Antibiogram.pdf">http://mara.mt.gov/documents/2008Antibiogram.pdf</a>. Questions? Jan Stetzer at <a href="mailto:jstetzer@mt.gov">jstetzer@mt.gov</a> or 406.444.0695